

**Exchange Hall**

**11:00-12:30** Poster presentations Session 1 Groups 1-4

<b>Eposter</b>	<b>Poster Session 1</b>	<b>Poster Session 2</b>	<b>Poster Session 3</b>	<b>Poster Session 4</b>
Dillon Horth Joanna Rees Asiyeh Salehi Yun Fu Bruna Costa Hansjorg Rothe Stephanie Bispo	Martin Prince Sarah Dix Jiali Duan	Salmah Lashhab Raha Katebi Will Dodwell Danielle Cowlin	Sanaa Zayyan Stephanie Rimmer Dillon Horth Rebecca Cox Danielle Cowlin Catherine Polling	Hong Fang Isil Ergin Jonathan Bedford Jianguo Yu Sabahat Ahmed Saad Javed

## E-posters

### Ref: 610 ePoster

Should All Infants Born Before 24 Weeks Gestation Be Resuscitated?

Presenting author: **Dillon Horth**. Manchester Medical School, Manchester Royal Infirmary, Oxford Rd, Manchester, Greater Manchester M13 9WL, United Kingdom.

**Abstract** Introduction Babies born under 24 weeks gestation are on the borderline of viability. Infants this young often face immediate life threatening problems, and if they survive will almost inevitably live with significant disability. Knowing this, the question becomes whether it is ethical to resuscitate and provide lifesaving treatment to babies born under 24 weeks gestation. **Methods** The following databases were searched to acquire the supporting literature for this dissertation: Ovid Medline, Ovid Embase, Google Scholar, Knowledge Network, Cochrane Library, Web of Science, PubMed, and SciVerse. **Key words** included: extremely premature birth, premature birth, resource rationing, cost-effectiveness, risk factors, outcomes of extremely premature birth, medical ethics, autonomy, beneficence, non-maleficence, justice, medical advances in neonatology, complications of birth and screening. **Selection criteria** were applied to narrow the results. **Discussion** In order to determine whether medical intervention is ethically acceptable in children born below 24 weeks gestation, I look at several important aspects relating to preterm birth. Using the exact rates of disability and survival in babies under 24 weeks, I try to determine how much good we are actually doing by treating such young neonates. The ethical concepts of beneficence, non-maleficence, justice and autonomy are essential components of this report and are discussed in detail. Additionally, it focuses on the associated financial, physical, and emotional burdens placed on parents and highlights the financial burden on the NHS. Two case studies are used throughout the paper to highlight and enforce key points. Since extremely premature birth is already a prevalent problem with a rising incidence across the world, how it is handled in several countries across Europe is also discussed. A brief overview of the risk factors for extremely premature birth is provided and I assess whether or not a screening program would be beneficial and effective in helping to reduce the rates of preterm birth. **Conclusion** I conclude that the aggressive management and resuscitation of babies born under 24 weeks gestation should not be the standard of care, particularly if the only reason for resuscitation is parental influence and an uncertain prognosis.

**Ref: 446 ePoster**

Adaptation of the 'Therapy Outcome Measure' (TOM) for use with untreated cleft lip and palate patients in the developing world: Environmental and Cultural issues

Presenting author: **Joanna Rees**

university of Sheffield, oral surgery department, Cumberland Infirmary, Carlisle, United Kingdom.

Co-authors: Joy Stackhouse, Pam Enderby

**BACKGROUND** Available data relating to repair of Cleft lip and/or palate (CLP) in adults indicates that surgical intervention does not result in significant improvement in speech. This limits the degree to which fund-holders direct their resources for this cohort resulting in many cases of adult CLP remaining untreated. However research currently focuses on speech analysis at a phonemic level and fails to acknowledge the psychosocial aspects of untreated CLP such as lack of autonomy, social exclusion, nasal regurgitation, emotional anxiety and poor educational and employment potential which are often only alluded to anecdotally. **AIM** This project aims to develop the already available Therapy Outcome Measure (TOM)<sup>1</sup> to reflect the psycho-social features affecting individuals with CLP in the developing world. **METHOD** Focus groups and informal interviews were used to gather information on the implications of living with untreated CLP in Karnataka State, India. The participants included 11 individuals who had experience of untreated CLP in adolescence or adulthood along with 16 family members. The resulting information was used to produce an adapted version of the TOM (CP-TOM). The viability of the ATOM was then tested by 6 International medical students comparing 7 pre-operative and post-operative hypothetical case scenarios. **RESULTS** The CP-TOM proved straightforward to use and demonstrated highly significant differences between the pre-operative and post-operative case scenarios ( $p < 0.005$ ). There was good inter-rater percentage reliability of 0.7 in all cases and the Kappa scores were above 0.7 sixty-six percent of the time. **CONCLUSION** The CP-TOM shows potential as Global tool for measuring physical and psychosocial outcomes for untreated CLP in a research environment. Further exploration is required in order to ascertain whether the CP-TOM can be shown to be accurate, robust and reliable both in different test environments and in the diverse setting of clinical practice. **REFERENCES** Enderby, P., John, A., Petheram, B. (1997). Therapy Outcome Measures for rehabilitation professionals. London: John Wiley & Sons, Ltd: Sussex, England

**Ref: 150 ePoster**

Injury Prevention Policy and Interventions among Elementary and High School Students in Beijing

Presenting author: **Yun Fu**

Beijing Center for Disease Prevention and Control No.16 Hepingli Middle St, Dongcheng District, Beijing, China

Co-authors: Jiali Duan, Xiaopeng Zeng, Xiuhua Guo

**Objectives:** This study was designed to evaluate the implementation of the "Outline Program for Development of Chinese Children (2011-2020)", which was to make a one-sixth decrease of injury mortality among children and adolescence, and to provide evidence and rationale for the Chinese government in order to formulate policies on injury prevention and measures. **Methods:** A proportional multistage cluster randomized sampling design was used to select 104 elementary and high schools from 16 districts of Beijing, and a total number of 16,680 students completed a retrospective questionnaire inquiring about injury during September 1st, 2011 and August 31st, 2012. **Results:** During 2011 and 2012, the incidence of injury of elementary and high school students was 12.87%. The injury incidence was 13.74% in urban areas, greater than 12.31% in suburbs ( $P < 0.05$ ). Male students suffered a higher incidence of 15.64% than 10.19% of their female counterparts ( $P < 0.05$ ). The incidence of injury was 8.24% in grades 1-3 in elementary school, while 13.11% in grades 4-6. Junior-high school students reported the highest incidence of injury, ie 17.28%; while in senior-high schools, there were 13.32% students injured. In all types of injuries, mostly reported was tumbles (7.36%), which constituted 57.22% of all adversities. Sites of injury were schools (41.65%), home (23.72%), roads and streets outside campus (15.24%), community (9.18%) and sport fields outside school (3.91%), farmland (1.72%), river or lake (0.65%), and others (3.91%). **Conclusion:** Injury has become a serious issue affecting elementary and high school students on their health status in Beijing. Injury may occur at school and living surroundings. Injury prevention and control in children and adolescence should be taken as an important part into the government's health policy on resident health and city security.

**Ref: 561 ePoster**

Spatial distribution of fruits and vegetables? shopping venues in the surroundings of the Health Academies in Belo Horizonte, Brazil.

Presenting author: **Bruna Costa**

Federal University of Minas Gerais Alfredo Balena 109, Santa Efigênia, Belo Horizonte  
Brazil

Co-authors: Oliveira, CDL; Lopes, ACS. An ecological study was conducted in order to examine the spatial distribution of fruits and vegetables (FV) shopping venues in the surroundings of the Health Academies (HA) in Belo Horizonte, Brazil. The HA are a primary care services of the Federal Government aimed at strengthening actions to promote health through physical exercise and healthy eating. Eighteen AH ? out from the 50 implanted in the City - were selected by a simple random drawing. Data from the venues with permission to commercialize FV were provided by the Municipality government. Establishments located within a radius n of 1,600 meters from each select HA were physically visited and analyzed. The following information was recorded in each venue: location; type of establishment; and availability, type, variety and advertising FV and processed foods products (such as soft drinks and cookies). The Index of Access to Food Establishments (IAFE) (including variables of availability, variety and advertising FV and highly processed foods) was used to analyze the quality of access to FV. Directional distribution of events and construction of thematic maps were carried. Kernel intensity estimator was used in the spatial analysis to identify areas with higher density of establishment and Ripley's K univariate function was employed to analyze the distribution pattern of commercial establishments. Areas with less than 10 establishments were excluded. A total of 728 establishments were visited. One third of them, (29.9 %; n=218), did not exist and 6.8% (n=50) refused to participate. Other 18.7 % (n=136) did not commercialize FV. Thereby, a total of 324 establishments were analyzed. More than half of them (58.7 %) were green grocery stores, 21.6 % belonged to large supermarket chains and 19.1 % were local markets. Of the 17 areas of HA analyzed only one showed clustering in the spatial distribution of commercial establishments. Only five HA were located inside the area with higher density of establishments and 11 were within the ellipse that demonstrated the spatial trend of establishments. The IAFE ranged from 5 to 16, with a median of 11. In the analysis of the establishments contained in the higher density areas (hot area), the presence of establishments with greater access to FV was noted in only 53 % (n=9) of the areas investigated. Therefore, most of the HA were outside the region with the highest density of establishments and nearly half of this hot areas (of all the areas investigated) were constituted by establishments with low access to FV. It is thereby noted that the attendees of the HA have limited access to FV shopping venues, thus, possibly compromising the capacity of this Health Promotion Service, to produce satisfactory results. Finally, policies to stimulate the presence of a larger number of health food shopping venues around the HA are highly recommendable, and will likely contribute to increase the consumption of FV in these areas.

**Ref: 777 Poster**

Public health age-related patterns of serum alkaline phosphatase levels as a quality criterion in dialysis populations

Presenting author: **Hansjorg Rothe**

Consultant Nephrologist, Klinikum Coburg, III. Medical Department, Klinikum Coburg, Ketschendorfer Strasse 33, 96450 Coburg, Germany

Co-authors:

Recent discoveries have lead to a new understanding of chronic kidney disease as a general state of accelerated vascular ageing. Several new biomarkers in the area of chronic kidney disease related mineral and bone disorder (CKD-MBD) have been described, which interact in the metabolism of parathormone, vitamin D, calcium-phosphate homoiostasis and clinical conditions such as vascular calcification and bone demineralization. With the incidence of chronic kidney disease rising in all European countries, there are also growing numbers of patients on maintenance dialysis who need best medical and most cost-effective care. However, it has become clear now that universal guidelines for target ranges of parathormone, serum calcium or phosphate levels etc. can only be recommended in fairly wide ranges, within which medical practitioners have to define regional targets to aim for in their respective patient populations. In order to make the best use of the available diagnostic and therapeutic options to prevent cardiovascular complications in chronic kidney disease paitents, the concept of accelerated vascular ageing may be used considering that in healthy adult populations age correlates with serum alkaline phosphatase activity: This presentation discusses an algorithm to adopt a public health care model using serum alkaline phosphatase levels as an easy tool to pre-screen dialysis patient populations in order to identify instead high risk patients in whom individual new biomarkers should then be used to fine-tune therapy goals.

**Ref: 359 Poster (in abstentia)**

Convergence of overweight and undernutrition in urban adolescents and the dissonance of correlated factors: a transition?

Presenting author: **Stephanie Bispo**

Universidade Federal de Minas Gerais, Avenida Professor Alfredo Balena, 190, Brazil.

Co-authors: César Coelho Xavier, Fernando Augusto Proietti, Waleska Teixeira Caiaffa

**Introduction:** The prevalence of overweight has increased sharply among adolescents, especially in the urban context. This suggests that not only habits and lifestyle, but also the environment influence choices and nutritional status of adolescents in a complex way. **Aims:** To evaluate the prevalence of overweight and obesity among adolescents in a large urban center and to verify, through a hierarchical modeling, factors from the individual, the household and the neighborhood associated to the adolescent's nutritional status and their well-being. **Design:** This study is part of a population-based household survey named 'Saúde em Beagá study', conducted in two sanitary districts of Belo Horizonte in 2008 and 2009. **Setting:** Data was obtained through a confidential questionnaire and anthropometric evaluation. An adult and an adolescent at the household were interviewed. The outcome was the adolescent's Body Mass Index (BMI) classified in thinness ( $P < 3$ ), normal weight ( $P3$  to  $P85$ ) and overweight ( $P > 85$ ), according to the WHO cut points (2007). It was evaluated considering distal and proximal influences of the factors possibly associated to overweight and the context where the adolescent lives (household and neighborhood), according to a hierarchical conceptual model using a multinomial regression analysis. **Results:** The prevalence of overweight was 21.9% and thinness 4.6%, among 1030 adolescents surveyed. At the most distal level, income of 5-10 minimum wages had the highest Odds Ratio (OR) for overweight ( $OR=1.73$ ), but higher education of the family's head was a protective factor to weight gain in adolescents ( $OR=0.57$ ) independently of the reported income. The only variable from the neighborhood domain that remained in the model was the report of unsafely neighborhood. At the household, an overweight adult was associated both to overweight ( $OR=3.21$ ) and thinness ( $OR=0.37$ ) in the adolescent. Lower report of fights in the family, and the adult's physical inactivity ( $<150$  minutes/week) were significantly associated with an overweight adolescent. Report of higher parent's attention and unhealthy diet (eating the skin from the chicken/beef fat and whole milk) were inversely associated to thinness. A worst wellbeing of adolescents was either related to thinness or overweight. **Conclusions:** This study shows peculiar expositions from an urban environment, and can contribute to the understanding of overweight in urban areas. As a concern of public health, nutritional extremes among Brazilian urban adolescents coexist and operate at many levels, from individual and family health behaviors to community features. However the determination of this health problem seems to be modulated by economic and educational factors.

**Poster Session 1**

**Ref: 468 Poster**

Do men who have sex with men, with HIV/Hepatitis C co-infection disclose their Hepatitis C status to their sexual partners? A qualitative study

Presenting author: **Martin Prince**

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Co-authors: Robert Miller, Cara Saxon, Vincent Lee

**Background & Aims:** Hepatitis C (HCV) infection rates are increasing in HIV positive men who have sex with men (MSM) across Europe. We aimed to study whether coinfecting MSM disclose their HCV status to sexual partners and reasons non-disclosure to help identify barriers to public health interventions. **Methods:** We asked all MSM patients with HIV and HCV co-infection treated by Central Manchester Sexual Health and Hepatology units to participate in semi-structured, audio-recorded qualitative interviews. We asked whether patients disclosed their infection status and reasons for this. Key themes were extracted. **Results:** 16 (46%) of traceable MSM patients participated. 15 (94%) participants disclosed HIV status in >75% of sexual contacts, but only 7 (44%) disclosed HCV status. Disclosure was not related to age, duration of diagnosis ethnicity or education level. Themes for non-disclosure included wanting to keep information private, perceived stigma of HCV and fear of rejection / expected reaction, failure by patient to accept HCV diagnosis, expectation of low risk of infection (due to low viral load or safer sex), that relationship was casual, Reasons for disclosure including increasing HCV awareness, fear of prosecution, responsibility, and feelings for partner. 19% of interviewees chose to be abstinent from sex. **Conclusions:** A lack of HCV awareness and perceived stigma / ignorance contributes to many of the themes for non-disclosure. Our data suggests the need for a HCV awareness / education campaign targeted to MSM in Great Britain.



**Ref: 85 Poster**

Single-Centre Audit Of Diagnostic Quality And Accuracy Of Patient Admissions Onto A High-Turnover AMU In A Busy District General Hospital

Presenting author: **Sarah Dix**

University of Manchester, University of Manchester, United Kingdom.

Co-authors: Venkat Sridharan

1. Background: High diagnostic standards are fundamental in good quality patient care. Rapid and accurate primary diagnoses in the acute medicine setting, saves resources; eliminating unnecessary investigations, reducing patient time spent on wards and safeguarding patients. 2. Method: This single-centre audit was based on high-turnover Acute Medical Unit (AMU) at a District General Hospital. Data was collected on diagnosis given on patient clerking and secondary diagnosis at senior review for 100 admissions over one week. Accuracy was analysed using Kappa-coefficient. Quality of diagnosis was considered by recording the frequency that symptoms alone were documented as the formal diagnosis. 3. Results: 76% accuracy was achieved on primary diagnosis of admissions. The main influencing factor appeared to be doctor seniority and thus clinical experience. An anomalous low standard was found in Core Training (CT) level doctors, this maybe due to the advisory role to foundation doctors; which is introduced at this grade. Foundation doctors saw higher diagnostic standards, which may have been at cost to CT doctors' overall accuracy. Junior doctors interviewed during the course of the audit, inferred a lack of confidence in less experienced clinicians to commit to a final diagnosis. 4. Discussion: This report explores ways of improving guidance for professionals to provide accurate and comprehensive diagnoses at first clerking. Early exposure to patient scenarios, during medical education; to encourage development of individual's methods, of achieving comprehensive differential diagnoses. Whilst also supporting the logical progression to categorical and deterministic evidence seeking which is essential when addressing lack of clinical experience in diagnosing independently. 5. Recommendations: Adapting the AMU clerking document will support a 'gold standard' in diagnosis and create a model to ensure comprehensive and acceptable diagnosis are documented. Introducing a 'surgical sieve' into AMU paperwork could encourage the formulation of inclusive differentials lists, eradicating 'symptom-only diagnosis' eg: advertisement of the TIMI (Cardiac) Risk score could help eliminate 'Chest Pain' documentation. With an additional suggestion to introduce 'diagnosis experience' education as a compulsory element in the medical education curriculum in UK medical schools, implemented from Year 1.

**Ref: 149 Poster**

An Investigation into College Students' Knowledge of Prevention and Vaccination of Hepatitis B at Baseline: A Community-based Health Promotion Program in Beijing

Presenting author: **Jiali Duan**

Beijing Center for Disease Prevention and Control, No.16 Hepingli Middle St, Dongcheng District, Beijing, China, China.

Co-authors: Xiaopeng Zeng, Li Zhang, Lixin Teng, Jianmin Zhang

**Objectives:** This study was designed to investigate into the knowledge of hepatitis B virus (HBV) amongst college students and their vaccination, in order to provide evidence and rationale for the college community-based health promotion program in Beijing.

**Methods:** A multistage cluster randomized sampling design was performed to select twenty colleges in Beijing, and a total number of 1,875 students of grades 1 to 3 completed a questionnaire of knowledge-attitude-practice (KAP) for HBV. **Results:** The program showed that the vaccination rate was 75.70% among the subjects, while the rate of strengthen immunization was 35.83%. 19.00% and 40.0% of the students had no idea whether s/he had ever received vaccination or strengthen vaccination, respectively. Only 32.87% of students had a complete awareness of the major routes of transmission of HBV. Of the three major transmission routes as blood, sex and mother-to-child, there were 85.5%, 79.3% and 68.4% subjects had the recognition, respectively. 60.0% and 59.6% subjects recognized that HBV were not transmitted through "having dinner together" or "sneeze or cough". 68.5% subjects had the fully awareness of all the effective ways to prevent HBV, among which "vaccination" was the highest (95.7%), and "always practice sex with protection" was the lowest (76.7%). **Conclusion:** The college students have certain knowledge of prevention of hepatitis B, but not systematic or complete. Neither the coverage rate of immunization or strengthen immunization of hepatitis B was not of satisfaction. It is necessary to organize health education and promotion programs in order to popularize the knowledge and improve vaccination rate.

## Poster Session 2

### Ref: 704 Poster

Lumbar Spine X-Ray Referrals for Low Back Pain

Presenting author: **Salmah Lashhab**

University of Manchester, Oxford Rd, Manchester, Greater Manchester M13 9PL, United Kingdom.

Co-authors:

**OBJECTIVES:** To ensure that any referrals made for lumbar spine X-Rays are in concordance with the Royal College of Radiologist guidelines and NICE guidelines.

**CRITERIA & STANDARD:** The NICE Guidelines for non-specific low back pain states that an X-Ray of the lumbar spine should not be offered. MRI referrals can be made for an opinion on spinal fusion, or if there is a suspected spinal malignancy, infection, fracture, cauda equina syndrome, ankylosing spondylitis, or any other inflammatory disorder. Referrals sent from GP Surgery in Kirkham, Lancashire should meet at least one of these criteria set by the Royal College of Radiologists: - Chronic back pain (>12 weeks) with no red flags AND presentation suggesting osteoporotic collapse in the elderly. - Chronic back pain (>12 weeks) with no red flags AND presentation suggesting spondyloarthropathies in young patients. - Acute back pain with osteoporotic collapse suspected. The standard set for this audit was 80%.

**METHODOLOGY:** Retrospective study. Looking at the time period 09/01/12-20/03/13. Sourced data from Vision notes and from Blackpool Victoria Hospital Referral Forms.

**FINDINGS:** - 50 cases - The number of referrals meeting the criteria- 5 The standard- 10% Inappropriate Referrals -The inappropriate referral number for Lumbar Spine X-Rays was 45 = 90% of referrals. - The most common reason for referrals was unspecified, accounting for 38%. - Should the referral forms be scanned into the Vision system? Should practitioners be more extensive in their note making? X-Ray Findings: Of the cases that were sent with a clinical diagnosis attached, 45% of those X-Rays showed positive findings to support the clinician's diagnosis. Referrals that were sent with no queried diagnosis showed a 16% likelihood of having a positive pathology on X-Ray. Based on this information, the doctors who made a diagnosis for why the patient had back pain were nearly three times more justified in sending for a scan than those who did not.

**Exposure to Radiation:** 45 patients were inappropriately exposed to radiation. - The estimated number of radiation induced cases of cancer for lumbar spine X-Rays in the UK is estimated at 39 per year.

**Cost:** NICE guidelines say an X-Ray costs £24. - Estimated annual cost of inappropriate X-rays= £864.

**X-Ray vs. MRI** ?One referral made for an X-Ray had been made second to an MRI but the patient could not wait 6 weeks for an MRI scan. - MRI scans are not accessible within General Practice whereas X-Rays are. - Is it practical to send patients for MRI scans instead of X-Rays?

**CONCLUSION:** The Royal College of Radiologist guidelines and NICE guidelines are not being adhered to. - Inappropriate referrals for Lumbar Spine X-Rays are being made.

**RECOMMENDATIONS:** Adhere to guidelines. - No inappropriate patient referrals. - Vision notes referral specification. - Guidelines in staff room. - Re-audit.

**Ref: 392 Poster**

One year survival of breast cancer in Bolton

Presenting author: **Raha Katebi**

Royal Bolton Hospital, Minerva Road, United Kingdom.

Co-authors: Sophie Curtis, Jane Ooi

**Background** Cancer survival is a key measure of the effectiveness of health-care systems. Persistent regional and international differences in survival represent many avoidable deaths. Cancer survival in the UK compared with other European countries of equivalent wealth has long been understood to be poor. Both the CONCORD and EURO CARE studies have demonstrated the international differences in cancer survival. **Aims** The aims of this study include; - Establishing 1 year survival rate for breast cancer patients diagnosed in the Royal Bolton Hospital between April 2011-April 2012. - Comparing these figures to both international and national rates. **Methodology** A list of patients who were diagnosed with breast cancer between April 2011 and April 2012 were collated via the Summerset database at the Bolton Breast Unit. These patients were cross-referenced with the Patient Manager system on the Bolton Hospital intranet which contains information regarding time and cause of death. **Results** Between April 2011 and April 2012, 331 people were diagnosed with breast cancer at the Bolton Breast Unit. Of the 331 people 14 passed away within the allocated time frame. The one-year survival for breast cancer in Bolton was 95.8 %. The ages of the patients, who passed away ranged from 55-94, with the mean age being 76.5. 72% of those patients who passed away had grade III or metastatic cancer. **Discussion** In Bolton one-year survival in 2011- 2012 was 95.7% this can be compared to 95.8% in the UK between 2005-2009. When compared with international figures one-year survival in Bolton for breast cancer compares poorly to other western countries. Studies have shown that international 1-year survival rates in Western European countries of equivalent wealth are better than survival rates for breast cancer in the UK. Despite this it has been shown that similar proportions of women were diagnosed in the early stages in the UK as in most other countries, but survival has been shown to be lower for women with late-stage breast cancer and older women in the UK compared to other countries. Our study helps to illustrate these findings. In our study the majority of deaths occurred in those older than 70 although co-morbidities will undoubtedly impact on survival. Furthermore the majority (72%) of those patients who passed away had stage III or metastatic breast cancer illustrating that the treatment of patients with late stage breast cancer may be sub-optimal. **Conclusion** 1-year survival of breast cancer in Bolton is in keeping with current 1-year survival data available in the UK. Older patients with breast cancer in Bolton have a poorer one-year survival, as do those with late-stage cancer. Several Western countries have demonstrated better one-year survival data than the UK therefore highlighting the need for further studies to identify the reasons for this and aid in bridging this gap.

**Ref: 726 Poster**

**The Surgical Management of Ectopic Pregnancy**

Presenting author: **Will Dodwell**

University of Manchester, UHSM, Southmoor Rd, Wythenshawe, Manchester, Greater Manchester M23 9LT, United Kingdom.

Co-authors:

**Aims** Ectopic pregnancy is a common condition seen in emergency medicine, general practice and gynaecology. The incidence in the UK is 11.1 per 1000 pregnancies and this number is increasing year on year, therefore, an understanding of the management available is essential in many areas of medicine. The aim of this report is to evaluate and compare the surgical options for the management of ectopic pregnancy. It will compare classical laparotomy with laparoscopic and minimal access techniques and compare salpingectomy and salpingostomy. **Design** Using available literature it will look at differences operating times, intraoperative bleeding, analgesic requirements, length of hospital stay, the risk of persistent trophoblast, damage to surrounding organs and vasculature, risk of recurrent ectopic pregnancy and the impact on future fertility. **Results** Laparoscopic techniques have been shown to decrease operating times, decrease intraoperative bleeding, reduce analgesic requirements and shorten hospital stays. However, they are slightly less effective at eliminating an ectopic pregnancy and have a slightly higher risk of persistent trophoblast. The incidence of persistent trophoblast and recurrent ectopic pregnancy is lower following a salpingectomy. The intrauterine pregnancy rates are the same regardless of the procedure unless there is contralateral tubal disease in which case a salpingostomy may offer a slight benefit in fertility. **Conclusions** In conclusion laparoscopic techniques have been shown to have benefits in patient who are haemodynamically stable; reducing operating times, surgical complications, analgesic requirements and shorten hospital stays. However, in patients with a ruptured ectopic with signs of haemodynamic instability there is still a role for laparotomy, as for most surgeons this the most expedient technique. Salpingectomy has a lower incidence of recurrent ectopic pregnancy and persistent trophoblast. There is no increase in intrauterine pregnancy rates if a patient has received a salpingostomy unless there is evidence of contralateral tubal disease, in which case it may offer some fertility benefit. As a result laparoscopic salpingectomy is the most commonly used technique for the elimination of ectopic pregnancy in the UK.

**Ref: 637 Poster**

Therapeutic hypothermia: the underused weapon in the arsenal against hypoxic brain injury after cardiac arrest

Presenting author: **Danielle Cowlin BSc (Hons)**

University of Manchester, Royal Preston Hospital, United Kingdom.

Co-authors:

**Introduction:** Sudden cardiac arrest is the leading cause of death in Europe. In those that do survive, permanent disability caused by hypoxic brain injury is a common devastating consequence for patients and carers, imposing substantial financial burden due to loss of life-years and rehabilitation costs. Therapeutic hypothermia - an intentional reduction in a patient's core body temperature to 32-35°C - is one intervention in an arsenal of strategies used, in an attempt to improve survival and neurological outcome after out-of-hospital cardiac arrest. It has been shown to reduce both the initial ischaemic brain injury and the subsequent reperfusion injury, but is currently being underused. **Case**

**Description:** A 52 year old Caucasian female was admitted into the Emergency Department with a Glasgow Coma Score of 3, following an unwitnessed collapse. She was making no respiratory effort and was in cardiac arrest. The paramedics had administered 5 cycles of cardiopulmonary resuscitation (CPR) prior to arrival. In the emergency department CPR continued, and after 2 minutes there was return of spontaneous circulation. Collateral history from family revealed the patient was normally independent, fit and well. She had no known cardiovascular disease or significant risk factors, and was not on any regular medications. It was agreed that despite the unknown length of time from collapse to start of CPR, the patient met all other criteria and was a candidate for therapeutic hypothermia treatment. Cooling with icepacks and fluids was immediately commenced in the emergency department, before transferring her to Critical Care. The target core body temperature of 33°C was quickly reached, using intravenous cooled fluids, and cooling blankets. Re-warming was commenced as per protocol approximately 24 hours later. Investigations carried out to determine the cause for the cardiac arrest included a brain CT (computed tomography) scan and blood electrolytes which revealed no acute abnormalities. However, abnormal Electrocardiogram (ECG), Echocardiogram and Troponin T results showed cardiac damage, and some possibility of an accessory electrical pathway potentially causing arrhythmia, and then myocardial infarction.

**Results:** Unfortunately the patient did not improve neurologically, and on day 8 agreement was reached for treatment to be withdrawn. It was concluded that the hypoxic brain injury sustained prior to commencing CPR was too great on this occasion.

**Discussion:** Whilst this particular case is not a compelling example, mounting evidence suggests that Therapeutic Hypothermia treatment in the first few hours after cardiac arrest, can increase survival, decrease hypoxic brain injury and improve neurological outcome considerably. It can be instigated quickly and efficiently in the emergency department, and then continued in critical care. This treatment is indicated for adult comatose patients who have suffered an out-of-hospital cardiac arrest, caused by ventricular fibrillation or pulseless ventricular tachycardia, and who have return of spontaneous circulation within 60 minutes. It should be widely available and embraced by appropriately trained physicians. Further work is required to determine the benefits of use with in-hospital cardiac arrests.

**Poster Session 3**

**Ref: 698 Poster**

Could an HbA1c target calculator improve glycaemic control in patients with diabetes in urban areas?

Presenting author: **Sanaa Zayyan**

University of manchester, Oxford road, manchester, m13 9pl, United Kingdom.

Co-authors: Saleem Akhter

Aim: 1) To look at the trends in HbA1c of this population sample and whether they support the need for an HbA1c calculator tool 2) to make suggestions and recommendations based on the results of the audit and the guideline provided by the National Institute of Clinical Excellence (NICE) on how an HbA1c calculator might work and which patients might benefit from it Design: an audit of patients with Diabetes Mellitus (DM) who had had an HbA1c measured in the last 12 months were classified into intervals based on their results to identify high risk groups with high HbA1c (>53mmol/mol) levels and to assess glycaemic control (considering good control as 75% having HbA1c =53mmol/mol). Setting: A general practice surgery in Oldham, Greater Manchester. Participants: 304 patients with DM type 1 or type 2 with a diagnosis based on the World Health Organisation (WHO) criteria. Results: 144/304 participants had an HbA1c =53mmol/mol, meeting the NICE target. 160 participants did not meet the target, with 47 of these having a very high HbA1c of >75mmol/mol. The range of HbA1c in this sample was 91mmol/mol (lowest 37 mmol/mol and highest 128mmol/mol). Conclusions: Patients from this population sample represent an area with higher than average prevalence of DM. 14% of these patients had very high (>75mmol/mol) HbA1c levels despite being on treatment. These patients are at a higher risk of developing irreversible complications from DM. NICE guidelines do not advocate intensive therapy to control DM and suggest an individualised target HbA1c. An HbA1c target calculator could be designed to target patients with a very high HbA1c values, with a view to produce achievable and realistic targets. This type of calculator the following demographics: patient age, diabetes type, current therapy, previous episodes of hypoglycemia, length of time since diagnosis, established complications and possibly previous HbA1c value to create a universal tool to be used as a guide to help gradual improvement in control. Following trial on this group of patients, this tool could eventually be extended and trialled to include all patients with DM using evidence-based guidance.



**Ref: 691 Poster**

A first presentation of Cushing's syndrome with severe osteoporosis in a young adult male

Presenting author: **Stephanie Rimmer**

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Co-authors:

This is a case report of an unusual presentation of Cushing's syndrome in a young adult male whose only initial complaint was severe back pain. Upon investigation of the pain with spinal x-rays this 22 year old was found to have multiple vertebral compression fractures and severe osteopenia of unknown cause. He presented with no other obvious symptoms. After a miss-referral to rheumatology and a long period being undiagnosed the patient was referred to endocrinology for testosterone replacement therapy, as low testosterone was thought to be the cause of osteoporosis. At this point his cortisol was detected as being raised and further investigations revealed he had Cushing's disease due to a pituitary adenoma. Other very subtle features of Cushing's subsequently became more appreciated. The patient received treatment at first with metyrapone and then with transsphenoidal removal of the adenoma, he has been improving ever since. This unusual presentation has been used to highlight and review the wide variety of signs, symptoms and the ranging severity of these that patients with Cushing's syndrome can suffer. Cushing's syndrome encompasses the clinical features and biochemical changes that result from long term exposure to inappropriately high levels of cortisol, with a loss of circadian variation and feedback mechanisms. The effects of hypercortisolaemia can be range from mild to severe and manifest in a number of ways, often mimicking other conditions. For these reasons diagnosis is often initially missed or signs and symptoms misdiagnosed. Prolonged diagnosis increased the risk of long term complications of exposure to high levels of steroids, either endogenous, as in this case, or exogenous and is associated with high morbidities and even mortality. The approach to initial diagnosis of high cortisol levels is reviewed as are the varied signs and symptoms that practitioners should be aware and so know when to suspect possible Cushing's syndrome. With an increase of awareness it may be possible to identify and treat greater numbers of patients with Cushing's syndrome before it progresses and causes irreversible changes.



**Ref: 609 Poster**

Should All Infants Born Before 24 Weeks Gestation Be Resuscitated?

Presenting author: **Dillon Horth**

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Co-authors:

**Abstract** Introduction Babies born under 24 weeks gestation are on the borderline of viability. Infants this young often face immediate life threatening problems, and if they survive will almost inevitably live with significant disability. Knowing this, the question becomes whether it is ethical to resuscitate and provide lifesaving treatment to babies born under 24 weeks gestation. **Methods** The following databases were searched to acquire the supporting literature for this dissertation: Ovid Medline, Ovid Embase, Google Scholar, Knowledge Network, Cochrane Library, Web of Science, PubMed, and SciVerse. Key words included: extremely premature birth, premature birth, resource rationing, cost-effectiveness, risk factors, outcomes of extremely premature birth, medical ethics, autonomy, beneficence, non-maleficence, justice, medical advances in neonatology, complications of birth and screening. Selection criteria were applied to narrow the results. **Discussion** In order to determine whether medical intervention is ethically acceptable in children born below 24 weeks gestation, I look at several important aspects relating to preterm birth. Using the exact rates of disability and survival in babies under 24 weeks, I try to determine how much good we are actually doing by treating such young neonates. The ethical concepts of beneficence, non-maleficence, justice and autonomy are essential components of this report and are discussed in detail. Additionally, it focuses on the associated financial, physical, and emotional burdens placed on parents and highlights the financial burden on the NHS. Two case studies are used throughout the paper to highlight and enforce key points. Since extremely premature birth is already a prevalent problem with a rising incidence across the world, how it is handled in several countries across Europe is also discussed. A brief overview of the risk factors for extremely premature birth is provided and I assess whether or not a screening program would be beneficial and effective in helping to reduce the rates of preterm birth. **Conclusion** I conclude that the aggressive management and resuscitation of babies born under 24 weeks gestation should not be the standard of care, particularly if the only reason for resuscitation is parental influence and an uncertain prognosis.

**Ref: 694 Poster**

A case of pulmonary TB in a homeless, UK-born male: Exploring poor adherence to TB treatment, with a focus on drug-resistant TB

Presenting author: **Rebecca Cox**

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Co-authors:

This report explores the case of a homeless, UK-born male living in Manchester. He was treated for pulmonary tuberculosis (TB) from March 2013 by directly observed therapy (DOT). He failed to comply with the regime due to side effects and lifestyle factors. In November 2013 he re-presented with TB which was thought to be drug resistant. Of UK-born patients, TB is most commonly associated with immunocompromised or social risk patients. In 2012 13.4% of UK-born cases had a social risk factor such as homelessness or substance misuse. Poor adherence to treatment causes drug-resistant TB. Adherence is lower in those with social risk factors. In 2012 13.5% of patients with isoniazid resistance were homeless. Multi (MDR) and extensively (XDR) drug resistant TB are a rising public health concern. They are challenging to manage and have increased mortality. Patients diagnosed with TB should be risk assessed for adherence. Identifying these patients and providing extra support (e.g. DOT) provides clinical benefit for the patient and can prevent the rise in drug-resistant forms of TB. DR and MDR-TB should be managed by a specialist team as poor management can lead to XDR-TB which has a high mortality.

**Ref: 688 Poster**

Placenta Praevia anaesthetic considerations. Necessary precautions or Overkill?

Presenting author: **Danielle Cowlin BSc (Hons)**

University of Manchester, Royal Preston Hospital, United Kingdom.

Co-authors:

Introduction: Placenta praevia, an obstetric complication whereby the position of the placenta lies close to or obstructs the cervical os, affects approximately 1 in 200 pregnancies at full term. It is a major cause of bleeding and haemorrhage in the second and third trimesters of pregnancy, causing significant maternal and foetal morbidity and mortality, thus placing significant demands on health resources. Antepartum haemorrhage, secondary to placenta praevia, carries a perinatal mortality rate of 2.3%. This very real risk must be anticipated and addressed by the anaesthetist, and the multidisciplinary team, to pre-empt and minimise excessive blood loss wherever possible.

Case discussion: A gravida 2, para 1 twenty-five year old woman was conveyed to the obstetric preoperative area at 35 6/7 weeks gestation. A diagnosis of major placenta praevia, grade IV was known, based on serial ultrasound findings, contraindicating vaginal delivery. The patient was therefore scheduled for an elective low segmental caesarean section delivery. The placenta was in an anterior position, making access to the foetus more technically difficult, and excessive blood loss much more likely. Based on a discussion between the anaesthetist, surgeon and patient, the modality of anaesthetic for the caesarean was chosen to be a combined spinal block with epidural analgesia. The epidural was mainly for post-operative pain relief, given the possible risk of extensive emergency surgery (hysterectomy) in this case. Regional anaesthesia was achieved without difficulty. Bilateral internal iliac artery catheterisation and balloon insertion was then carried out by the interventional radiology team, under ultrasound and X-ray guidance and via the common femoral arteries. This was a precaution; in the event of massive haemorrhage, the balloons could be inflated and slow blood loss from the uterus. Blood 'cell saver' equipment was also installed. Immediately on delivery of the baby, oxytocin was given to assist uterine contraction and reduce blood loss. The wound was closed and haemostasis was quickly achieved with an estimated total blood loss of 700mL. On completion of the operation, the internal iliac artery balloons were removed, with the femoral arteries stitched closed. Results: Fortuitously no haemorrhage occurred in this case, and a good overall outcome was achieved. Discussion: Achieving favourable outcomes in cases of placenta praevia is dependent on accurate prenatal diagnosis, early anaesthetic risk assessment, good intra-operative anaesthetic management, and the work of skilled surgeons. The anaesthetist should be well prepared, well resourced, and have an arsenal of strategies available to manage this high risk and unpredictable condition. Some may argue that use of the expensive cell saver equipment and interventional radiology team in these cases - at the request of the anaesthetist - is a waste of valuable resources. However, with haemorrhagic shock being the cause of 80% of deaths in the operating theatre, it can also be argued - can the anaesthetist really ever be too prepared?

**Ref: 187 Poster**

Spatial patterns in self-harm incidence in South East London

Presenting author: **Dr Catherine Polling**

Institute of Psychiatry, Kings College London, Institute of Psychiatry, Weston Education Centre, 10 Cutcombe Rd, London SE5 9RJ, United Kingdom.

Co-authors: Dr Alex Tulloch, Prof Matthew Hotopf

**Background:** National UK research on small-area rates of self-harm has used hospital admission due to self-harm as an outcome. Deprivation has been consistently identified as the strongest area-level predictor of self-harm rates. However, rates of hospital admission for self-harm in inner London at borough level are below the England & Wales average despite high levels of deprivation in these areas. **Aims:** 1. To identify if there is variation in local government ward level incidence of self-harm leading to Emergency Department (ED) attendance in South East London 2. To examine patterns in self-harm rates & their relationship with area level deprivation **Methods:** The Clinical Records Interactive Search (CRIS) system contains de-identified clinical records of all patients treated by South London & Maudsley NHS Trust. These records, linked with Hospital Episode Statistics data, were used to identify individuals resident in Lambeth, Southwark, Lewisham & Croydon boroughs of London who presented to EDs following self-harm in 2009-2011. Poisson regression was used to produce incidence rate ratios (IRRs), weighted for the likelihood of attending a study ED. Linear regression was used to examine the relationship between income and employment deprivation (Index of Multiple Deprivation, 2010) and self-harm rates at the area level. IRRs were mapped to identify spatial patterns in the relationship between self-harm and deprivation. **Results:** Rates of self-harm varied by ward, broadly reflecting patterns seen in hospital admission data. IRRs for self-harm ranged from 0.44-1.52. Overall, rates of self-harm were associated with both income and employment deprivation. The effect of deprivation was greater and explained more of the variance in outer London wards than inner London wards. Mapping identified a group of inner London wards with rates that were lower than would be predicted by their level of deprivation. **Discussion:** There was significant variation in rates of self-harm leading to ED presentation between different areas of South East London. In line with previous research self-harm rates were associated with deprivation. However, in inner city areas the effect of deprivation was smaller suggesting that other aspects of these areas or their populations are acting as protective factors against the effect of deprivation on self-harm rates. **Funding:** CRIS is supported by and CP, MH and AT receive salary support from the NIHR Biomedical Research Centre for Mental Health BRC Nucleus at the South London and Maudsley NHS Foundation Trust and Institute of Psychiatry, King's College London jointly funded by the Guy's and St Thomas' Trustees and the South London and Maudsley Trustees.

**Poster Session 4**

**Ref: 177 Poster**

'Trinity' Management of Hypertension Based on E-system

Presenting author: **Hong Fang**

Centre for disease control and prevention of Minhang, Shanghai, China, No 965, Zhongyi Rd, Minhang, Shanghai, China, China.

Co-authors: Yujie Yan, Xi Chen, Yanping Zhao, Jinling Zhang, Yinan Liu

Objective: to explore and practice the 'Trinity' management of hypertension in 'Community Clinic-Centre for Disease Control and Prevention-General Hospital' via E-system. Method: to analyze the efficiency of the 'Trinity' management of hypertension through the review of electronic data collecting hypertension patients' Electronic health record (EHR) and Electronic medical record, two-way referral, follow-up service and performance evaluation from community clinics, Centre for disease control and prevention and general hospitals within Minhang district of Shanghai from 2007-2011. Result: the 'Trinity' management of hypertension has advanced early-detection among high risk group and improved work effectiveness. The number of patient under hypertension management had more than fourfold increase from 32,000 in 2007 to 145,800 in 2011. Standard treatment rate rose to 95.97% while the rate of controlled blood-pressure had a growth to 83.06% and the stroke incidence was restrained to a slight increase of 4.26%, achieved by the combination of follow-up service and clinical preventive service. Conclusion: A fully integrated intervention which gathered -chronic disease prevention - treatment – rehabilitation- has received a positive reflection in comprehensive hypertension management relying on Electronic health record. The implementation of E-system introduced management classification and early-detection for chronic diseases which would decline the incidence and prevent complications in a prospective view.

**Ref: 129 Poster**

Are governmental policies for the elderly in Turkey sufficient to diminish wealth inequalities?

Presenting author: **Isil Ergin**

Ege University, Department of Public Health, Ege University, Department of Public Health, Bornova-Izmir, Turkey.

Co-authors:

Introduction: The physical and mental decline in old age has social and economic consequences. The family had served a major role in diminishing this burden, but with modernization, the family changed. As a consequence, social policies were developed. The health needs of the elderly were met by social security, pension, and public health systems but the developing economies lacked this sufficient support. The changing age structure and the foreseen 16 million elderly in 2050, make aging an alarming issue in Turkey, too. The concept of family is subject to change, thus the sufficiency of social support policies should be questioned in the context of inequalities. Aim and Method: The governmental documents (regulations, action plans and development plans) on social security, pension, and public health systems regarding elderly and available national studies have been reviewed for this evaluation. Social security coverage and wages, capacity of nursing homes, the means of acceptance to them, home-care service, the gender gap for ownership and income, the state of regional inequalities and the user fees in health service delivery were investigated. Results: Social security system coverage is quite low and minimum wages are inadequate. The nursing homes operated by the Social Services and Child-protection Agency are far below the need in number and capacity. The acceptance to these houses bares social and economic inequalities. The governmental organization for elderly home-care is limited only to medical care. Social needs for daily living are supplemented to those in need by some Municipalities, but the context or the workforce of the service varies and it is very much dependent on the resources of the Municipality. Thus, underdeveloped regions generally lack such assistance. Applying for homecare is built on bureaucratic barriers for those with low education and less awareness of health and social needs. Major wealth inequalities exist for elderly women regarding ownership to assets and income/old age pension. Underdeveloped regions marked with low socio-economic development, bad health and low access to health services are more susceptible to unhealthy aging. Public health system consists co-payments for every health service admission and for drugs, even at primary care. Conclusion: Policies that aim to develop better social security coverage and context as well as increased health and social service access for those in need is essential. In the absence of appropriate policy interventions, the health inequalities of elderly people are to become a larger problem for developing countries in the next few decades.

**Ref: 847 Poster**

Social learning theory and the use of social media in health promotion

Presenting author: **Dr Jonathan Bedford**

Imperial College NHS Trust, Charing Cross Hospital, Fulham Palace Road, London W6 8RF, United Kingdom.

Co-authors:

Background Social media is a form of increasingly popular on-line media which allows the creation, sharing and discussion of web-based content. The use of social media for health education is growing and sites such as Facebook and Twitter are now commonly used for information delivery and discussion. There are many types of social media including social network sites, Wikis (collaborative websites such as Wikipedia), blogging sites (sites where one or more users can record information on a personal webpage) and content communities where users can post and comment on videos. This on-line content can be delivered in a variety of ways including static websites, on-line videos or slideshows, or indeed through one or more of the many aforementioned sites or programmes providing social media capabilities. The popularity of on-line media in combination with the high usage of social media technology is spurring the use of these technologies to engage with professionals and the public on key health topics. Social learning theory Health education delivered via social media is rooted in social learning theory. This states that people learn in a social framework through observation. This observation provides the information for the observer on which to base their behaviours and actions. The observational learning could occur in a live situation model with a behaviour being demonstrated, a verbal model with the descriptions of a behaviour, and a symbolic model with the behaviour being demonstrated via other means, for example a video or on-line media. The concept of situated learning states that the learning of a behaviour or action should occur in the environment in which it will be carried out. This theory is at odds with the view of learning as the transmission of knowledge out of context. It is rooted in the concept of 'co-construction' where learning occurs through participation in a social and physical environment. Aim The use of social media in health promotion and public health continues to grow in popularity. This poster will outline the value of social media in health promotion in the context of social learning theory with evaluation of its current usage.

**Ref: 723 Poster**

Work-Related Musculoskeletal Disorders: Focus on Risk Factors and Prevention Strategies

Presenting author: **Sabahat Ahmed**

University of Manchester, University of Manchester, Stopford Building, Oxford Road, United Kingdom.

Co-authors: Dr Clare Rayner, Dr Dil Sen

Background: Work-related musculoskeletal disorders (WRMD) are a group of common disorders arising in individuals that are exposed to particular work activities and conditions that can initiate the development or exacerbation of such disorders, thereby leading to chronic pain, functional impairment and consequential disability. Aim: The aim of this review is to provide an outline of WRMDs, describing the important risk factors which influence the prevalence of musculoskeletal disorders (MSD) and identifying preventative measures which can be enforced at the workplace. Discussion: WRMDs are the biggest cause of work-related ill health and absence, affecting workers in a variety of occupations, all over the world. There is a noticeable higher prevalence of WRMD in occupations that involve a great deal of manual handling, repetitive and stationary work, though individual health and psychosocial factors have also been found to influence the predisposition of such individuals to musculoskeletal disorders. Effective preventive strategies which have shown to prevent and improve the risks of WRMD include implementing ergonomic amendments, manual handling training and appropriate workplace health promotion. Conclusion: The application of preventative measures is very important in reducing risk of WRMDs, and has been shown to also improve worker's job satisfaction and attendance, leading to increased efficiency and productivity and great economic benefit. In order to reduce the prevalence of WRMDs long-term it is imperative that preventative strategies are followed at the work place, and employees receive adequate education and training in managing MSDs.



**Ref: 727 Poster**

Promoting cardiovascular health: current concepts in tackling the challenge of urbanisation

Presenting author: **Saad Javed**

University of Manchester, Stopford Building, Oxford Road, University of Manchester, Manchester, United Kingdom.

Co-authors: Healsen Ihuoma, Hani Essa, Omer Ali

Background and aims: Cardiovascular disease is recognised as the leading cause of mortality worldwide with more than 80% of deaths occurring in middle and low income countries. The rise in cardiovascular risk factors is further increasing the global burden of heart disease. As urbanisation reshapes population health towards non-communicable diseases (including cardiovascular and related diseases), organisations around the world have emphasised that a multi-faceted approach is required to achieve global health. We aimed to review the main approaches proposed by global organisations and in medical literature to tackle the rising burden of global cardiovascular health. Methods: We searched OVID MEDLINE and OVID EMBASE databases for articles related to cardiovascular global health and cardiovascular urban health. We largely selected publications in January 2010 to December 2013 but did not exclude other highly regarded articles that were judged relevant. We also reviewed the World Heart Federation's recent report on Urbanization and Cardiovascular Disease and the Institute of Medicine's 2010 report on Promoting Cardiovascular Health in the Developing World. Results: Recent studies emphasise approaches based on healthcare delivery, healthcare communication and policy changes. It is suggested that good urban planning to enable individuals to make and maintain healthy choices, improved access to preventative, diagnostic and therapeutic services, enhanced knowledge of cardiovascular disease, and a child-focused dialogue are the major objectives in promoting cardiovascular health globally. Conclusion: It is imminently possible to tackle the rising global burden of public health but this requires implementation on intersectoral strategies. This requires collaboration between a wide range of organisations and actors. Of particular note is the need to manage cross-cutting links between the environment children develop in and the risk of developing heart disease in order to raise heart-healthy children in cities.

**Exchange Hall**

**14:00-15:30** Poster presentations Session 2 Groups 1-4

Poster Session 1	Poster Session 2	Poster Session 3	Poster Session 4
Sarah Dix Jiang Li Carolyn Egesa Meiying Zhu	Aleena Suhail & Sarwar Mateen Martin Sharrock Marie Coughlin Marcel Leppee Monica Rodrigues x4	Xiuhua Guo Kerry Foley Sanaa Zayyan Monica Malik Mohamed Izham Mohamed Ibrahim	Peter Mackereth Junling Gao Xiaopeng Zeng Chawthip Boromtanarat Chris Meechan

**Poster Session 1**

**Ref: 672 Poster**

How old is old enough?

Presenting author: **Sarah Dix**

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Co-authors:

A small-scale sample at an urban GP revealed a cohort of 29 patients (18 female, 1 male) who have attended the practice for contraception advice before the age of 16. The ages at which these patients presented ranged from 13-15 years old. The patients were prescribed a variety of methods of contraceptive treatment, most commonly the combined-oral contraceptive pill; but included 2 patients who requested emergency contraception following unprotected sexual intercourse. The patients consulted the GP in a range of situations, with 15 attending with a parent or relative and 13 patients consulting alone, requesting the consultation was kept confidential from their parents. No patients from the sample consulted with their partners. Age of sexual consent in the UK is 16, but it is estimated that around 1/3 of British teenagers have sex aged 14 or 15. The UK has the highest rates of teenage births and abortions in Western Europe and in England in 2010 alone there were 6,674 conceptions to girls under 16 years old. However, prescription of contraceptive treatment to those under-16 is lawful, without requiring parental knowledge or consent. This legislation followed the case of *Victoria Gillick v West Norfolk & Wisbech Area Health Authority*, and the development of the notion of 'Gillick competence' as an assessment of medical capacity. Nevertheless, many medical professionals still feel unsure about prescribing contraception to girls under 16 without parental acknowledgement. This paper explores the legal age of sexual consent, the laws around sexual behaviour and minors, in addition to discussing the issues surrounding prescribing contraception to those under the legal age of consent, including the high profile case of *Gillick v West Norfolk & Wisbech Area Health Authority*.

**Ref: 169 Poster**

The Mortality and Cause of Death attributed to Diabetes mellitus in Shanghai Songjiang District: A ten year retrospective analysis of death certificates

Presenting author: **Li, Jiang**

Fudan University, School of Public Health, Fudan University, PO Box 248, 138 Yixueyuan Road, Shanghai 200032, China.

Co-authors: Fu Hua, Zhu Mei-ying

The prevalence of diabetes mellitus has been nearly tripled in the last decade in China. Diabetes has already become a huge burden of people and society. However, few data is available about the death attributed to diabetes for the Chinese population. A retrospective study of death certificates, coding based on ICD10, from 2002 to 2012 was made to estimate the changing characteristic of death attributed to diabetes. During the ten years, the age of death for diabetics increased three years, from 73 to 76, also the mortality of diabetes increased slightly. In the death cases related diabetes, the proportion attributed to diabetes decreased by 24%, from 46.7% in 2002 to 22.0% in 2012. In the cases, for whom cause of death was diabetes, the proportion of without complication decreased by 23.9%, from 52.6% in 2002 to 28.7% in 2012. However, the proportion of deaths from renal complication has been doubled, from 14.0% to 32.2%. It suggests that the diabetes complications contributed more and more to the cause of death.

**Ref: 576 Poster**

Understanding and Preventing Violence Against Older Women (VAOW) in Urban Slum Settlements in Kenya

Presenting author: **Carolyn Egesa**

University of Southampton, University Rd, Southampton SO17 1BJ, United Kingdom, United Kingdom.

Co-authors: Hilda Akinyi

Violence Against Women (VAW) is common, serious and carries significant risks to the health and wellbeing of women and girls. It affects families and communities, saps household resources, puts pressure on family ties, and depresses family members. Worryingly, one in three women in the Kenya is likely to experience it, with serious implications for their health and wellbeing. This paper seeks to address critical gaps in our knowledge of Violence Against Older Women (VAOW) to help ensure the availability of urgently-needed up-to-date evidence on the prevalence, forms and risk factors of Violence Against Older Women (VAOW) in poor urban settlements in Kenya, the VAOW-related attitudes, beliefs and experiences of men and women in urban Kenya as well as the challenges, opportunities and strategies for community involvement in the prevention of VAOW. Methodology-The paper uses secondary data from a study that was conducted in 2010 in two slums in Nairobi, Kenya. The sample comprised of women and female youth. These persons were recruited through a multistage sampling process involving slum households and ultimately individuals in the samples households. The primary method of data collection was in-depth interviews, focus group discussions, and key informant. A qualitative inductive approach involving thematic examination of the narratives was adopted to interpret the data. Findings and Conclusion- Violence against women is an obstacle to the achievement of the objectives of equality, development and peace. It both violates and impairs or nullifies the enjoyment by women of their human rights and fundamental freedoms. In Kenya, as in many other developing societies, weak law enforcement and state structures, the persistence of male-biased gender norms, low levels of education, poverty, and male domination of the social and political institutions, and gender inequity in access to social services and resources have been key to sustaining VAW (KDHS, 2008-09). The prevention of VAOW is key to sustainable human development, the attainment of equal rights and opportunities for women and men, ending extreme poverty in its many dimensions, and ensuring that human development reaches everyone, everywhere, as articulated in the Millennium Development Goals (MDGs) set to be achieved by 2015.

**Ref: 113 Poster**

Application of Trend-Season Model to Forecast the Epidemic Trend of Injury in Songjiang District of Shanghai

Presenting author: **Mei-ying Zhu**

Songjiang District Center for Disease Prevention and Control, Shanghai, 1050 North Xilin road, Songjiang District, Shanghai, China.

Co-authors: HUANG Li, YAN Wei-jun

[Abstract] Objective: To forecast the occurrence trend of injury in 2012 with Trend-Season Model by analyzing the injury occurred during 2007-2011 in Songjiang district of Shanghai. Methods: Statistical analysis on the injury surveillance data from 2007 to 2011 in Songjiang was conducted by using software SAS(Statistical Analysis System)9.1 and Excel 2003. Results: There were total 326351 injury cases reported during 2007-2011, and the ratio of male to female was 1.90:1 with 213743 men and 112608 women. The age with high incidence was 25 to 44, and the cases were 129 326, which accounted for 39.63%. Top three causes of injury were the mechanical effect of objects/equipment, tumble/drop and traffic accidents, and the number of cases were 117862 (36.12%), 114225 (35.00%) and 67 578 (20.71%), respectively. Most injury cases occurred in summer and reached the peak from July to September every year, and the injury cases in the three months were 101 071, accounting for 30.97%. Linear regression equation simulated by using weeks as independent variable and injury cases as dependent variable ( $Y=2.242X+956.69$ ), revealed that the injury cases in Songjiang had an increasing tendency year by year. Conclusion: Injuries during the 5 years occurred more in men than in women, mainly in summer, and there was a rising trend year by year. The occurrence of injury should be monitored closely and preventive measures should be taken timely according to the Trend-Season Model predictions.

## Poster Session 2

### Ref: 678 Poster

An audit of seasonal influenza vaccination uptake in patients aged over 16 years at one primary care centre in Bolton, Manchester.

Presenting author: **Aleena Suhail and Sarwar Mateen,**

University of Manchester, Oxford Road, Manchester M13 9PL, United Kingdom.

Co-authors: Sarwar Zenab Mateen, Dr Koushal A Boodhun

Background: In the UK, it is estimated that annually 10000 deaths are caused by seasonal influenza (flu), and in the years of a flu epidemic, this estimate has reached 20000.

Department of health's green book suggests patients in the "risk" group for developing complications due to flu should be offered the vaccine. Symptoms of flu result in 1 million GP consultations and 30,000 hospital admissions every year. This places a significant burden on the NHS, which could be reduced through effective vaccination uptake in higher risk groups. Aim: Our aim was to evaluate the current methods of offering the seasonal influenza vaccinations to people over 16 years, quantify the vaccination uptake rate and explore the reasons for non-uptake, at one primary care centre. We wanted to consider potential improvements in the methods for offering the vaccination, in order to increase uptake. Criteria: The flu vaccination should be given to : 1- Patients over the age of 65 years. 2- Patients in the clinical risk groups. (i) Patients with certain clinical conditions (ii) Pregnant women (iii) Immunosuppressed patients (iv) Carers and healthcare professionals Standard: 75% for all criteria. Results: 2190 "at risk" patients were identified, of which 1754 patients received the vaccination. Out of the 436 patients who didn't receive the vaccine, 28 patients were contacted by telephone. The reasons given by patients varied. 46% had concerns about the vaccine based on their past experience, the ideas of their family and friends or ideas they gained from the media. 42% had a lack of information relating to the vaccine itself, including its safety, efficacy, side effects. Other reasons included "it doesn't work" or "didn't feel the need for it". Discussion: The current methods employed by the practice were very effective as 80% of the "at risk" patients received the vaccination and more to take it in the next few weeks and months. However, more focussed individual patient education can be provided using patient discussion groups. Patient education about the flu jab itself, its ingredients, side effects and potential allergies can be discussed.

**Ref ID: 693 Poster**

Diagnosing Hypertension in Primary Care

Presenting author: **Martin Sharrock**

University of Manchester, Oxford Rd, Manchester, Greater Manchester M13 9PL, United Kingdom.

Co-authors:

Introduction: Hypertension is a major health burden in the UK, however, despite its prevalence is poorly diagnosed in general practice. Whilst classically hypertension is seen to be both an under-diagnosed and under-treated condition, there is a select group of patients in whom the diagnosis is incorrectly made and receive unnecessary treatment; most likely due to the 'white-coat' effect. As a result of these inadequacies NICE produced new guidance in 2011 regulating the clinical management of hypertension.

Aims: This audit aims to review the performance of a general practice in implementing the new NICE guidance in relation to the diagnosis of hypertension. Study Design: Three criteria were formulated and assessed in accordance to the new NICE guidance. Criterion 1 stated that all patients with a clinic blood pressure (BP) reading of  $\geq 140/90$  mmHg should be offered ambulatory blood pressure monitoring (ABPM) or home blood pressure monitoring (HBPM). Criterion 2 stated that all patients with severe hypertension (systolic BP  $\geq 180$  mmHg, or diastolic BP  $\geq 110$  mmHg) should be started on antihypertensive drug treatment immediately, without waiting for the results of ABPM or HBPM. Criterion 3 stated that whilst waiting for the results of ABPM or HBPM, all patients should be: (a) investigated for target organ damage (albumin:creatinine ratio (ACR), urine dipstick, blood glucose, urea and electrolytes (U&E), lipid profile, fundoscopy and 12-lead ECG), and (b) undergo a formal assessment of cardiovascular risk. A standard of 100% was set for each of the three criteria. Participants: The study extended from 1st September 2011 to 23rd November 2013 and included all patients ( $n=32$ ) who presented during this period with their first raised clinic BP reading ( $\geq 140/90$  mmHg). Results: Criterion 1: 23 patients were offered ABPM or HBPM (71.9%). Criterion 2: All 9 patients who presented with severe hypertension were started on immediate hypertensive therapy (100%). Criterion 3a: 18 patients had their ACR measured (56%), 21 had a urine dipstick (66%), 29 had their blood glucose, U&E and lipid profile measured (91%), 6 underwent fundoscopy (19%), and 24 patients had a 12-lead ECG (75%). Criterion 3b: 29 patients underwent a formal cardiovascular risk assessment (91%). In total, criterion 3 was met in 66% of patients. Conclusion: Whilst the practice performed reasonably well at diagnosing hypertension it did not reach the standards that were set. Therefore, in order to adhere to the new guidance improvements are required. General measures such as improving staff awareness of the hypertension guidance and updating practice templates and protocols are suggested, however, particular focus should be made on improving the use of ABPM, HBPM and fundoscopy. Once these changes have been implemented the data should be re-audited in a year's time to review the progress that has been made.



**NHS Bowel Cancer Screening Programme: Improving Uptake Rates in Merseyside**  
Presenting author: **Siobhan Farmer on behalf of Daniel Seddon and Marie Coughlin**

**Screening and Immunisation Lead (Merseyside), NHS England/ Public Health England**  
**Regatta Place, Brunswick Business Park, Summers Road, Liverpool, L3 4BL**

About one in 20 people in the UK will develop bowel cancer during their lifetime. It is the third most common cancer in the UK and the second leading cause of cancer deaths, with over 16,000 people dying from it each year. Regular bowel cancer screening has been shown to reduce the risk of dying from bowel cancer by 16 per cent and in 2006 the NHS Bowel Cancer Screening Programme (BCSP) was introduced in England.

Both men and women aged 60 up to 75 years are eligible for bowel cancer screening and people over 75 can self-refer. A national pilot has been taking place which will see the introduction of a new test, flexible sigmoidoscopy, to a younger age group. This new test, called NHS Bowel Scope Screening is being rolled-out this year.

Since the introduction of BCSP in Merseyside in 2006, the national benchmark of 60 per cent uptake has been difficult to achieve, despite efforts via a range of health improvement initiatives. This presents a need for continual and new initiatives.

Further to a successful Cheshire & Merseyside *Improving Awareness and Uptake Rates in Bowel Cancer Screening across Cheshire & Merseyside* project undertaken in 2011/2012, the same communications approach was rolled-out last year to 25 GP practices in Halton & St Helens, Sefton and Knowsley Primary Care Trusts. The aim was to write to the last (up to) 100 non-responders in each GP practice and to seek a response rate of 5 per cent or more in each practice.

The project was funded collectively by the Primary Care Trusts and was based on evidence that a personal and direct communication from GP to patient could have a positive impact on a person's decision to take up the offer of screening.

Two thirds of GP practices that submitted data saw an increased responder rate of 5 per cent or more, with a GP practice range of 0 to 15 per cent and an overall response rate of 6.4 per cent. A total of 2087 letters were sent with 137 previous non-responders taking up the offer of screening;

- Of those screened 132 had a normal result and 5 had a positive result.
- Of the 5 patients with positive screening results who went on to have a diagnostic test, 3 were treated for pre-cancerous polyps and entered onto a surveillance register and 2 were diagnosed with bowel cancer.

A further 50 GP practices in Merseyside have signed up to take part in the project in 2014 as the approach continues to be utilised.

**Ref: 236 Poster**

Communication between pharmacist, physician and patient with the aim to increase adherence to medication

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Co-authors: Josip Culig, Ivana Radman, Kresimir Mandic, Roman Urek

**PURPOSE** Purpose of the study is to determine relationships between pharmacist, patient and patient's family physician with special emphasis on the comparison of adherent and non-adherent patients. A self-administered questionnaire was used **METHODS** A self-administered questionnaire was used in 635 patients collecting/buying drugs for the treatment of chronic diseases and 84 pharmacists dispensing drugs for chronic diseases to patients. **FINDINGS** Comparison of particular answers between patients and pharmacists revealed a discrepancy, with a statistically significant difference in five of eight answers. The highest difference was recorded in answers to the question whether pharmacist offered thorough advice to the patient on how to take the drug; affirmative answer to this question was given by 90.5% of pharmacists and only 57.2% of patients. The analysis of respondents claims about their relation with doctor shows that in the first place, with the highest number of positive responses, is the claim of respondents that his/her doctor always explains the results of laboratory tests and other specialized findings (n=489, 77.0%). The biggest difference between adherent and non-adherent respondents is in the patient claims that his/hers doctor does not listen sometimes. Pharmacist-physician-patient relationship can improve adherence to medication. It is very important to empower pharmacists to offer and allow time for patient counseling. This communication efforts can be assisted by re-educating patients about the pharmacy, providing resources such as patient literature, promoting continued study and documentation of pharmacist results, and creating continuing education training that include communication skills and strategies.

**Ref: 294 Poster**

Estimating of Short-Term Effects of Urban Air Pollution and Risk of Hospitalization in Portuguese Metropolitan Areas

Presenting author: **Mónica Rodrigues**

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Co-authors: Paula Santana

A number of epidemiologic studies have reported the effects of particulate air pollution and specific particulates on Chronic Obstructive Pulmonary Disease (COPD) among children, adults and the elderly. This investigation examined the association between PM10 concentrations and hospital admissions (HA) in Portuguese Metropolitan Areas (PMAs) for COPD (ICD9 490-499). The information regarding hospital admissions (HA) in Lisbon Metropolitan Area (LMA) and in Porto Metropolitan Area (PMA) was obtained from the Diagnosis-Related Group (DRG) records at the Health System Central Administration (ACSS). The HA data corresponding to each metropolitan area and each group of causes (children aged 0-14, adults aged 15-64, and people aged 65 and older) were organized as daily time series for the period between 2003 and 2010. The analytical approach used in the examinations of HA in context of weather was also adapted here. Daily air pollution data from all monitoring stations for PM10 in LMA and PMA were obtained and computed. Correlation analysis of HA in relation to PM10 concentrations was performed separately for LMA and PMA. The data were analyzed using Generalized Additive Models (GAM), adjusted for weather and time trend. Relative Risks (RR) for daily COPD admissions were obtained using Poisson regression. The results of this investigation, together with results of previous research, confirm that air pollution is associated with daily admissions hospitalizations for COPD. The study offer evidence of a clear relationship between environmental conditions (levels of atmospheric pollutants) and the number of increase hospital admissions in PMAs. This research indicate that policies oriented to increase the presence of green around cities, may be effective in mitigating pollution generated within urban zone and therefore in the number of hospitalizations for respiratory and chronic obstructive pulmonary diseases.

**Ref: 348 Poster**

Risk Prediction Models for COPD Admissions in Portuguese Hospitals

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Time series analyses methodology, in particular ARIMA models (autoregressive integrated moving average models, Box and Jenkins models) which have the ability to cope with stochastic dependence of consecutive data, have become well established in such fields as economics, infectious diseases and health services. Forecasts of epidemiological time series are needed for many reasons. In the case of the public health organizations where hospital admissions (HA) data, resulting from the monitoring of hospital services, can help predict the number of people presenting to hospitals, thereby offering an advantage for the planning of health service delivery requirements. Forecasting can also be used as a complementary method to intervention analysis. The main objective of this study is to apply ARIMA models to make predictions on the daily number of patients visiting the hospitals for Chronic Obstructive Pulmonary Disease (COPD) (ICD9 490-499) in the Lisbon Metropolitan Area (LMA) and in Porto Metropolitan Area (PMA). Data were obtained from the Diagnosis-Homogenous Group (DHG) records at the Health System Central Administration (ACSS). Six years of data from January 2003 to December 2009 data were used to develop a forecasting model for the following six consecutive months and were processed for validation. The Index of Agreement (ID), Mean Absolute Percentage Error (MAPE), Root Mean Squared Error (RMSE) and average absolute percentage error (AAPE) were calculated between predicted and observed admissions to evaluate the predictability of the model. We found that the ARIMA (2,1,2) model was able to describe and predict the number of HA for COPD in MAL and ARIMA (2,0,1) model has been developed for the AMP. The models evaluation statistics suggest that considerably satisfactory real-time forecasts of HA can be generated using the Box-Jenkins approach. The implementation of a forecasting service for use by general practitioners in the PMAs may help reduce hospital admissions and associated costs.

**Ref: 356 Poster**

Statistical Models for Environmental Health Effects: the Case of Children's Hospital Admissions for Asthma in Portugal

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Co-authors: Paula Santana

The contribution of air pollution due to respiratory diseases is a major issue in the health-environmental perspective. Early severe air pollution episodes, characterized by high levels of particulate pollution, have been associated with considerable hospital admissions. The study examined the effects of concentrations of pollutants (CP) in ambient air on hospital admissions for Asthma (HAA) Metropolitan Areas (Lisbon and Porto). Data on HAA in persons aged less than 14 years (children) were obtained from the Diagnosis-Homogeneous Group (DHG) records at the Health System Central Administration (ACSS) for the years 2003 through 2010. Daily counts of admissions, by admit date, were computed for Asthma (ICD9 493). Daily concentrations of nitrogen dioxide (NO<sub>2</sub>), sulphur dioxide (SO<sub>2</sub>), ozone (O<sub>3</sub>), carbon monoxide (CO) and particulate matter (PM<sub>10</sub>) were obtained from all monitoring stations in Lisbon Metropolitan Area (LMA) and Porto Metropolitan Areas (PMA). In this analysis HAA were associated with environmental factors throughout the period under study, but with marked seasonal differences. Spearman's rank correlations were used to examine associations between HAA, air pollutants and weather factors. Then the autoregressive integrated moving average (ARIMA) models were used to evaluate the relationship between HAA and CP. ARIMA model was first applied to the predictor variable, and then to the dependent variable. For modeling by autocorrelation function (ACF) and partial autocorrelation (PACF) methods, examination of values relative to auto regression and moving average were made and at last, an appropriate model for estimation of HAA values were found. To introduce objectivity in the numerical error analysis, the performance of the models were evaluated by certain statistical evaluation indices: the mean absolute percentage error (MAPE), the Akaike Information Criterion (AIC), Bayesian Information Criteria (BIC) and Hannon-Quinn Information Criterion (HIC). This study provides further evidence of the effect of environmental conditions on HAA and it suggests that is necessary to apply policies oriented to decrease the concentration of pollutants in urban areas.

**Ref: 647 Poster**

Mortality in Metropolitan Areas of the Portugal: Forecasting Performance in Epidemiology, 2000-2010

Presenting author: **Mónica Rodrigues**

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Co-authors: Paula Santana

Many previous investigations have presented forecasting models for mortality; however, very little research has been devoted to comparing existing methods to determine their relative utility. At this research the characteristics of mortality time series will be analyzed for Portuguese Metropolitan Areas (Lisbon and Porto) and, a statistical model will be proposed by the use of using the Box and Jenkins methodology. Data were collected from the Diagnosis-Homogeneous Group (DHG) records at the Health System Central Administration (ACSS) for the years 2000 through 2010. Six years of data were used to develop a forecasting model for the following six consecutive months and were processed for validation. A series of model evaluation statistics are presented. Observed and forecast means and standard deviations, intercept and slope of a least squares regression of forecast variable on observed variable, mean absolute (MAE), root mean squared errors (RMSE) and its decomposed components - systematic (RMSEs) and unsystematic (RMSEu). This paper demonstrates the utility of using some criteria of goodness of fit in response to a recurring problem in the application of ARIMA models, specifically, uncertainty in model identification and selection. The forecasting performance of the present research is good and can be effectively utilized in public health services.

**Ref: 702 Poster**

Are patients with high blood glucose levels but no diabetes diagnosis being correctly tested and followed up?

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Co-authors:

**Aim** To identify patients with high blood glucose who required formal diabetes diagnosis. To identify those who needed further tests to confirm diabetes. To exclude those who did not meet the diagnostic criteria for diabetes. **Design** Audit Setting GP practice in Oldham. **Participants** Twenty six patients with a raised blood glucose on a blood test but no formal diabetes diagnosis. **Results** The results of this audit were as follows. Six of these patients had had more than one abnormal blood glucose level and in accordance with NICE guidance, should have been commenced on some form of treatment. One patient had been given a diagnosis of impaired glucose tolerance within their notes and had not been informed of this and so had not begun any kind of treatment. Two patients had had their high blood glucose levels recorded as normal in the notes. Three had agreed to attempt diet and exercise to lower their blood glucose. This left fourteen patients with a single high blood glucose but no follow up measurements. **Conclusions** This audit has shown that at this practice, several patients with high blood glucose levels are not being correctly followed up. This audit identified several patients in need of commencement of diabetic treatment and several patients in need of follow up investigations to either confirm or refute a diagnosis of diabetes. It also showed that there were several patients who did not have high blood glucose levels but were flagged as having them.

**Ref: 698 Poster**

Could an HbA1c target calculator improve glycaemic control in patients with diabetes in urban areas?

Presenting author: **Sanaa Zayyan**

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Co-authors: Saleem Akhter

**Aim:** 1) To look at the trends in HbA1c of this population sample and whether they support the need for an HbA1c calculator tool 2) to make suggestions and recommendations based on the results of the audit and the guideline provided by the National Institute of Clinical Excellence (NICE) on how an HbA1c calculator might work and which patients might benefit from it **Design:** an audit of patients with Diabetes Mellitus (DM) who had had an HbA1c measured in the last 12 months were classified into intervals based on their results to identify high risk groups with high HbA1c (>53mmol/mol) levels and to assess glycaemic control (considering good control as 75% having HbA1c =53mmol/mol). **Setting:** A general practice surgery in Oldham, Greater Manchester. **Participants:** 304 patients with DM type 1 or type 2 with a diagnosis based on the World Health Organisation (WHO) criteria. **Results:** 144/304 participants had an HbA1c =53mmol/mol, meeting the NICE target. 160 participants did not meet the target, with 47 of these having a very high HbA1c of >75mmol/mol. The range of HbA1c in this sample was 91mmol/mol (lowest 37 mmol/mol and highest 128mmol/mol). **Conclusions:** Patients from this population sample represent an area with higher than average prevalence of DM. 14% of these patients had very high (>75mmol/mol) HbA1c levels despite being on treatment. These patients are at a higher risk of developing irreversible complications from DM. NICE guidelines do not advocate intensive therapy to control DM and suggest an individualised target HbA1c. An HbA1c target calculator could be designed to target patients with a very high HbA1c values, with a view to produce achievable and realistic targets. This type of calculator the following demographics: patient age, diabetes type, current therapy, previous episodes of hypoglycemia, length of time since diagnosis, established complications and possibly previous HbA1c value to create a universal tool to be used as a guide to help gradual improvement in control. Following trial on this group of patients, this tool could eventually be extended and trialled to include all patients with DM using evidence-based guidance.



**Ref: 703 Poster**

Preventing prematurity using transabdominal cervical cerclage in an inner city French hospital - a case report

Presenting author: **Sanaa Zayyan**

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Co-authors: Luka Velemir

**Background:** The main aim of cervical cerclage is the prevention of prematurity, as it is the leading cause of neonatal morbidity and mortality. This case report describes a woman para 2 gravida 4 with a history of recurrent late miscarriage, still birth and neonatal death attributed to cervical insufficiency. This woman had no known risk factors for cervical insufficiency but was repeatedly measured to have a sub satisfactory antepartum cervical length using transvaginal ultrasound and was eventually offered cervical cerclage. Included is a review of the Royal College of Obstetrics and Gynaecology (RCOG) guidelines on the indications for cervical cerclage and the diagnostic criteria for cervical incompetence. **Aims:** 1) To determine whether transabdominal cerclage can prevent prematurity and late miscarriage in the case of woman with a history of recurrent late miscarriage, stillbirth and unsuccessful transvaginal cervical cerclage **Design:** A case report **Setting:** A general hospital in an inner-city district of Nice, France **Participant:** A female patient of Moroccan descent who suffered 2 second trimester miscarriages, 1 neonatal death resulting from prematurity and 2 unsuccessful attempts at transvaginal cervical cerclage. **Methods:** During this patient's fourth pregnancy, at 15 weeks, this patient underwent a transabdominal cervical cerclage to prevent a further premature delivery using a laparoscopic technique **Results:** Following the transabdominal cerclage, this pregnancy was uncomplicated and successful resulting in healthy baby boy at term weighing 3.2kilograms **Conclusion:** Transabdominal cervical cerclage can prevent preterm labours, stillbirth or late miscarriage in women with significant history of suspected cervical incompetence in the absence of risk factors. A history-based transabdominal cerclage, offered to women who have suffered 3 or more premature deliveries or second trimester fetal losses can prevent prematurity and improve neonatal birth weight. This complies with current guidance.

**Ref: 98 Poster**

Impact assessment of pharmaceutical care intervention on newly diagnosed diabetes mellitus outpatients in a tertiary care hospital of a sub metropolitan city of Western Nepal

Presenting author: **Mohamed Izham M.I.**

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Co-authors: Dinesh Kumar Upadhyay, Vijay M. Alurkar, Pranaya Mishra

**Background:** Diabetes has been recognised as a devastating and deadly disease. Almost every country is under the burden of diabetes. Poor socioeconomic status and lack of knowledge regarding disease are the major hurdles to be addressed in management of the diabetes mellitus. Education and counselling would be helpful for the patient to maintain their blood glucose level, which directly affects the patient's quality of life. **Aims:** To evaluate the impact of pharmaceutical care intervention on health-related quality of life (HRQoL) of newly diagnosed diabetes mellitus patients in a tertiary care hospital. **Design:** Randomized controlled trial (RCT) and an interventional, pre-post comparison study were applied. A sample size of 162 patients was selected over 6-months duration (from July 2010 to December 2010) and randomization was done by 1:1:1 in three parallel groups: control group (n= 54) with no interventions, i.e. they received their usual care; test 1 group (n= 54) in which patients were subjected to pharmaceutical care (PC) intervention only and test 2 group (n= 54) in which patients were subjected to PC intervention along with a demonstration of a diabetic kit. The baseline HRQoL scores of all the study patients were evaluated by using the Audit of Diabetes-Dependent Quality of Life (ADDQoL) questionnaire and repeated during four subsequent follow-ups (3-months, 6-months, 9-months and 12-months). The responses were coded and entered by using SPSS version 16. Mann-Whitney U and Friedman tests (at alpha level 0.05) were used to find out the differences among groups before and after the interventions. **Setting:** Tertiary care hospital of a sub metropolitan city of Western Nepal **Participants:** Newly diagnosed diabetes mellitus outpatients **Results:** Patient's HRQoL was negatively associated with their age. At baseline, patients perceived their present quality of life as "bad". A repeated measure analysis showed significant improvement in HRQoL and satisfaction of the patients in their each follow-up ( $p<0.001$ ) following intervention. There were significant ( $p<0.001$ ) improvements in patients' average weighted impact scores (AWIS) in both test groups on Friedman test. The significant improvements in patients' AWIS due to pharmaceutical care intervention were observed between test groups and, control and test groups on Mann-Whitney U test. The significant differences in AWIS between test 1 group and test 2 group were found at 6-months ( $p=0.033$ ), 9-months ( $p<0.001$ ) and 12-months ( $p<0.001$ ). However, there were significant differences in patients' AWIS at 12-months ( $p<0.001$ ) between control group

and test 1 group and at 9-months ( $p<0.001$ ) and 12-months ( $p<0.001$ ) between control group and test 2 group. Conclusions: The results of the present study revealed that pharmaceutical care intervention improved AWIS. It showed positive outcomes for diabetes mellitus patients in terms of HRQoL. **Poster**

Do patients satisfied with pharmaceutical care activity? Impact assessment of newly diagnosed diabetes mellitus patients in a tertiary care teaching hospital in Nepal

**Ref: 99 Poster**

Presenting author: **Mohamed Izham M.I.**

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Co-authors: Dinesh Kumar Upadhyay, Vijay M. Alurkar, Pranaya Mishra

Background: Patient satisfaction is the ultimate goal of healthcare system which can be achieved from good patient-healthcare professional relationship and quality of healthcare services provided. Aims: The study was conducted to determine the level of satisfaction of newly diagnosed diabetes patients at baseline and to explore the impact of pharmacist-provided pharmaceutical care intervention on satisfaction level of patients during their follow-ups in a tertiary care teaching hospital in Nepal. Design: An interventional, pre-post randomised controlled study was designed to explore the impact of pharmaceutical care intervention on baseline satisfaction of 162 newly diagnosed diabetes patients at the Manipal Teaching Hospital, Pokhara, Nepal by a consecutive sampling method for a period of 18 months. The patients were randomised into control group (n= 54), test 1 group (n= 54) and test 2 group (n= 54). The baseline satisfaction scores of all the patients were evaluated using Diabetes Patient Satisfaction Questionnaire and repeated at three, six, nine and, twelve months' follow-ups. The responses were coded and entered in SPSS version 16. Data distribution was found not normal on Kolmogorov-Smirnov test. Non-parametric tests i.e. Friedman, Mann-Whitney U and Wilcoxon signed rank tests were used as per the applicability to find the differences among the groups before and after the intervention. Setting: Tertiary care hospital of a sub metropolitan city of Western Nepal Participants: Newly diagnosed diabetes mellitus outpatients patients Results: There were significant ( $p < 0.001$ ) improvements in patients' satisfaction scores in both the test groups on Friedman test. The significant improvements in patients' satisfaction scores due to pharmaceutical care intervention were documented between test groups and, control and test groups on Mann-Whitney U test. The statistical significant differences in satisfaction scores between test 1 group and test 2 group, control group and test 1 group and, control group and test 2 group were noticed at 3-months ( $p = 0.008$ ), ( $p < 0.001$ ) and ( $p < 0.001$ ), 6-months ( $p = 0.010$ ), ( $p < 0.001$ ) and ( $p < 0.001$ ), 9-months ( $p < 0.001$ ), ( $p < 0.001$ ) and ( $p < 0.001$ ) and, 12-months ( $p < 0.001$ ), ( $p < 0.001$ ) and ( $p < 0.001$ ) follow-ups respectively. Conclusion: The finding of the study revealed the significant improvement in satisfaction level of newly diagnosed diabetes patients following pharmacist provided pharmaceutical care intervention and hence describes the role of pharmacist in healthcare system.

**Ref: 124 Poster**

Smoke free cancer care - on site and beyond

**Poster Session 4**

**Ref: 124 Poster**

Smoke free cancer care - on site and beyond

Presenting author: **Dr Peter Mackereth**

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Co-authors: Paula Maycock, Charlotte Finchett & Linda Orrett

**Brief Abstract:** The poster or workshop presentation will include: - Background and rationale for developing a health advisory service at a major tertiary cancer centre - An overview of clinical activities including; interventions provided, training of staff, results of two annual surveys, health assessments and brief opportunistic advice work with patients and carers - Details of external activities/collaboration with Manchester Fire Service, Manchester Stop Smoking Services and Manchester Community Alcohol team - Reporting of findings/outcomes from these activities and discussion of key learning and future planning. **Project Overview:** Smoking causes a range of illnesses and disability, most become apparent after years of smoking. In 2009, 35 per cent of all deaths in England were from respiratory diseases and 29 per cent of deaths from cancers were attributed to smoking (DoH, 2011; NHS Information, 2010). It is important to offer smoking cessation support to family and friends of smokers to increase quitting in the wider community and reduce cancer rates. It is now recognised that hospital visits and stays provide an opportunity for clinical staff to identify and assist patients to stop smoking, and so reduce treatment side-effects and promote recovery (Jones, 2011; Parsons et al, 2010; Williams et al, 2005). At The Christie smoking cessation services have been provided by a team of health advisors led by Dr Peter Mackereth since 2006. The smoking cessation care package includes; assessment and advice, NRT provision and stress management techniques. In 2012-13 a CQUINS Smoking and Alcohol Advice initiative focussing on preoperative care, lung cancer and head and neck services. During the project over 4,000 health assessments were completed. During the same period CQUINS Health Inequalities/Brief Opportunistic Advice training was provided to over 1,000 clinical staff. In addition, the team initiated an externally funded breast cancer project to support women to go smoke free during treatment and beyond; the aim being to assist in preventing further metastasis and new lung primaries and to reduce smoking related side-effects of treatment. **References** DoH (2011) Healthy Lives, Healthy People: A Tobacco Control Plan for England. DoH Tobacco Programme 7th Floor Wellington House 133-155 Waterloo Road London SE1 8UG Jones, K. (2011) Ward off the smoking addiction. The Advisor Spring Edition 2(1): 6-7 NHS Information Centre (2010). Statistics on Smoking: England. NHS information centre, Leeds. Parsons, A, Daley, A, Begh, R, Aveyard, P. (2010) Influence of smoking cessation after diagnosis of early stage lung cancer on prognosis: systematic review of observational studies with meta-analysis. BMJ.

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**Ref: 88 Poster**

Workplace social capital and smoking among rural-to-urban workers: a multi-level, cross-sectional study in China

Presenting author: **Junling Gao**

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Co-authors: Junming Dai, Hua Fu

**Aims:** Large number of peasants moved into cities stimulated by rapid urbanization and industrialization in China. Rural-urban migrants were separated from family and spent much time with co-workers in workplace, so workplace is much more important for them to reconstruct social capital. The present study sought to investigate the associations between workplace social capital and smoking status among Chinese rural-to-urban workers. **Methods:** A cross sectional study with a two-stage stratified sampling procedure was conducted in Shanghai during July 2012 to January 2013. In total, 5,996 rural-to-urban workers from 77 workplaces were involved. Workplace social capital was assessed using a validated and psychometrically tested eight-item measure. Control variables included gender, age, marital status, education level, salary, problematic drinking and medical care. Multilevel logistic regression analysis was conducted using to explore whether individual- and workplace-level social capital was associated with smoking. **Results:** Overall, 25.2% of the subjects smoked currently. Multilevel logistic regression analysis indicated that the smoking prevalence among male workers was higher than female workers (OR=22.2, 95%CI: 17.0-28.3), the smoking prevalence among workers with problematic drinking was higher than works without problematic drinking ((OR=3.3, 95%CI: 2.7-4.0). After controlling for sociodemographic characteristics and problematic drinking, compared workers with the highest quartile individual-level social capital, the odds of smoking for workers with the third quartile, second quartile and lowest quartile were 1.15(95%CI: 1.02-1.41), 1.24(95%CI: 1.13-1.57) and 1.51(95%CI: 1.20-1.89) respectively. But there was no relationship between workplace-level social capital and smoking status. **Conclusions:** Higher individual-level social capital is associated with lower likelihood of smoking among Chinese rural-to-urban workers. By contrast, no clear association was found between workplace-level social capital and smoking. Further intervention studies are warranted to examine whether reconstructing social capital is effective to smoking cessation among rural-to-urban workers in Chinese workplaces.

**Ref: 151 Poster**

Tobacco Use among High School Students in 11 Provinces of China, 2011

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Co-authors: Jiali Duan, Xiuhua Guo

**Objective:** This study was designed to investigate into the prevalence and the risk factors of tobacco use among Chinese adolescents, in order to provide evidence and rationale for the Chinese government to formulate policies on tobacco control and intervention.

**Methods:** According to the geographical partitions and varied economic levels of China, a proportional multistage cluster randomized sampling design was used to select 44 high schools from 11 provinces, and a total number of 38,839 students were under investigation using standard questionnaires. **Results:** Among the high-school students investigated, 22.5% subjects had ever attempted to smoking (33.2% of males and 11.2% of females). The rate of current smoking was 15.8% (22.9% of males and 5.4% of females). The attempt and current smoking rates were both higher in male students than in female counterparts, and were higher in rural areas than in urban as well. The rate of smoking attempt was the highest (26.2%) in 12-14 year-old group. Among subjects attempted smoking, the cigarettes were mostly (39%) "given by friends". Of 64.1% who tried smoking, the main impulse were "out of curiosity". Most current tobacco users "purchased the cigarettes by themselves". A month before the survey, 54% students expend over RMB50 on smoking. There was 31.1% parents smoked before their off-springs in the last 30 days; 53.4% students reported they had seen peer smoking; and 16.3 students reported tobacco use by their closest friends. Over half (50.1%) of the students reported frequent shots of smoking in movies and television plays. And 70.9% students held the belief that these shots would have a negative impact on them.

**Conclusion:** The situation of tobacco control is of seriousness among adolescents in China as a large quantity of students are exposed to tobacco use. In high schools, effective health education modes and specific measures to prevent students for smoking is of crucial importance and be worked out.



**Ref: 338 Poster**

Management and Performance of Home Health Care Services among Chronic Patients in Urban Areas of Suphanburi Province, Thailand

Presenting author: **Dr.Chawthip Boromtanarat**

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Co-authors:

Currently, the number of chronic disease patients is increasing rapidly so demand for home health care (HHC) services is increasing. This is appropriate and consistent in all aspects of disease prevention, health promotion, treatment and rehabilitation. The services can reduce complications and the severity of patients' symptom, the number of hospital services, and expenditures. The purpose of this qualitative research was to study management and performance of HHC services for chronic patients in urban areas of Chao Praya Yommarat Hospital in Suphanburi province and identify problems and suggestions. The samples consisted of 5 administrators and 16 health providers of the social medicine department. The data was collected by in-depth interviews between 1st and 20th December 2012. The data was analyzed by content analysis. The results found that most chronic patients in urban area of Suphanburi province had diabetes and hypertension. The management for HHC services aimed to provide holistic care. There were 3 primary care centres. Human resources management provided the nurse practitioners and professional nurses for each centre. There were 5-6 communities in each zone. Budgets were allocated from the central government and the hospital's maintenance money. Adequate materials and equipment were provided. The principle of HHC services was to strengthen proactive services. An action plan was completed clearly including the personnel, budget and coordination with the relevant authorities. The operation started from in-patient wards. A list of the name of chronic disease patients was sent to home visit centre of the Social Medicine department and home visit nurses. Then the data was returned. The coordinators were the members of the professional healthcare team and health volunteers. Factors affecting the success of this operation were hospital executives, adequate budget allocation and equipment and materials. The problems were that the patients were elderly and they could not confirm appointments before the home visit by phone, and the patients were not found because they had moved to relatives' home. Suggestions should develop the potential of health volunteers to participate in HHC services. Conclusion, HHC services for chronic disease patients in the urban areas are very important. Because there is a demand for more HHC services. Therefore, the management of HHC services should be planned about manpower, budget and the materials and equipment used in the operation to clear. In a home visit to each home, health provider should be a multi-professional health care team consisting of family doctors, nurse practitioners, pharmacist, physiotherapists and health volunteers.

**Ref: 817 Poster**

A Philosophical Framework for Psychiatry: Is Pluralism the answer?

Presenting author: **Christopher Meecham**

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Co-authors:

Practice and research in psychiatry will always be constrained by underlying philosophical assumptions. This poster offers a brief critique of how pluralism addresses two key philosophical problems. The first is the conceptual issue of understanding the ontology of mental illness. The second is the methodological issue of the means by which it may be investigated. The poster: a) Outlines why any psychiatric paradigm should address these problems in order to provide a successful, scientific basis for research and practice. b) Provides a brief overview of how three major traditional psychiatric paradigms; psychoanalysis, biological reductionism and the biopsychosocial model have attempted, but ultimately failed, to overcome these two problems, setting the historical context for a resurgence of interest in pluralism. c) Provides a brief overview and critique of pluralism, arguing it may provide a short-term pragmatic approach but it can only be seen as a 'quasi-intermediate' paradigm for psychiatry, as it cannot provide an ontology of mental illness to guide its methodology. To conclude, I argue a truly scientific psychiatry requires the grounding of a unified theory of mental illness.